

REMARKS

In response to the Office Action of October 25, 2007, Applicants have amended the claims, which when considered with the following remarks, is deemed to place the present application in condition for allowance. Favorable consideration and allowance of all pending claims is respectfully requested. The amendments to the claims have been made in the interest of expediting prosecution of this case. Applicants reserve the right to prosecute the same or similar subject matter in this or another application.

Claims 1 and 3-54 are pending in this application. By this Amendment, Claims 30, 31, 33 and 34 have been amended and Claims 8, 10-21, and 25-28 were withdrawn from consideration due to a restriction requirement. Accordingly, Claims 1, 3-7, 9, 22-24 and 29-54 are now under examination in this application. Support for the amendment of Claims 30 and 31 can be found throughout the specification, e.g., paragraphs [0061] and [0064] and Claim 29. Support for the amendment of Claims 33 and 34 can be found throughout the specification, e.g., paragraphs [0061] and [0066] and Claim 32. Applicants respectfully submit that no new matter has been added to this application. Moreover, it is believed that the claims as presented herein place the application in condition for allowance.

The Examiner has rejected Claims 30, 31, 33 and 34 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, it is the

Examiner's belief that the recitations "the low molecular weight polyethylene oxide" in Claims 30 and 31 and "the high molecular weight polyethylene oxide" in Claims 33 and 34 lack antecedent basis. Claims 30, 31, 33 and 34 have been amended in a manner believed to obviate this rejection. Accordingly, withdrawal of the rejection of amended Claims 30, 31, 33 and 34 under the second paragraph of 35 U.S.C. §112 is respectfully requested.

The Examiner has rejected Claims 1, 5, 29-34, 37 and 42-54 under 35 U.S.C. §102(e) as being anticipated by Li et al. U.S. Patent No. 6,893,660 ("Li et al.").

Li et al. disclose stable oral controlled release solid dosage formulations without the need for acid stabilizers. Li et al. further disclose that stabilization of the controlled release solid dosage forms is achieved by sealing low and high molecular weight polyethylene oxides with a water-soluble polymer, thereby physically separating them away from the pharmaceutically active ingredient, e.g., bupropion. Thus, according to Li et al., low and high molecular weight polyethylene oxides are first sealed with a water-soluble polymer such as hydroxypropyl methylcellulose and then the sealed low and high molecular weight polyethylene oxides are combined with a composition containing the pharmaceutically active component to form a stable composition.

In contrast thereto, the solid oral controlled release pharmaceutical composition of the present invention, as set forth in the claims, does not separate the pharmaceutically active agent and controlled release modifying complex. Rather, the claimed solid oral

controlled release pharmaceutical composition is obtained by mixing the pharmaceutically active agent with the controlled release modifying complex, i.e., (i) a primary release modifying agent such as a low molecular weight polyethylene oxide; (ii) a secondary release modifying agent such as a high molecular weight polyethylene oxide; and (iii) an auxiliary release modifying agent such as a starch derivative. If desired, the claimed solid oral controlled release pharmaceutical composition can be coated with a coating agent such as hydroxypropyl methylcellulose. Accordingly, the claimed solid oral controlled release pharmaceutical composition is completely different than the stable oral controlled release solid dosage formulations of Li et al.

For the foregoing reasons, amended Claims 1, 5, 29-34, 37 and 42-54 are believed to possess novel subject matter over Li et al. Therefore withdrawal of the rejection under 35 U.S.C. §102(e) is respectfully requested.

The Examiner has rejected Claims 1, 3-7, 9, 22-24 and 29-54 under 35 U.S.C. §103(a) as being unpatentable over Li et al. in view of Besemer et al. U.S. Patent No. 5,585,114 (“Besemer et al.”) and Wadhwa U.S. Patent No. 6,642,276 (“Wadhwa”).

The Examiner asserts in the Office Action that Li et al. disclose a pharmaceutical composition comprising bupropion HCl, polyethylene oxide (M.W. 200,000), polyethylene oxide ((M.W. 5,000,000), HPC, lactose anhydrous, silicon dioxide and magnesium stearate. The Examiner also asserts that Besemer et al. disclose the use of retrograded amylase as a release modifying agent in pharmaceutical compositions, and

that retrograded amylose is resistant to breaking and is subject to little or no disintegration and little to no attack by the enzyme alpha-amylose, nor by acid. The Examiner further asserts that Wadhwa discloses that macrolides such as clarithromycin are alkaline and acid sensitive.

Thus, according to the Examiner, “[i]n an effort to find improved clarithromycin pharmaceutical compositions, one skilled in the art would have been motivated to combine the disclosures of the ‘660, ‘114 and ‘276 patents to afford the elected invention, with a reasonable expectation of success.” The Examiner goes on to allege that one would be motivated to substitute the alkaline, acid sensitive drug bupropion hydrochloride in the composition disclosed by Li et al., for the alkaline, acid sensitive drug clarithromycin, and to substitute hydroxypropyl methylcellulose for acid-resistant retrograded starch.

Contrary to the Examiner’s assertions, Applicants respectfully submit that the combination of Li et al., Besemer et al. and Wadhwa would not provide the claimed composition in the current application. Initially, Applicants note that the main teaching of Li et al. is a pharmaceutical composition that provides additional stability without the use of stabilizers. As stated above, the inventors of Li et al. were able to accomplish this by preventing direct contact between bupropion and the excipients (i.e., low and high molecular weight polyethylene oxides) with a seal coating of hydroxypropyl methylcellulose. Accordingly, the primary goal of Li et al. is to segregate the excipients

from the pharmaceutically active ingredient. Therefore, the combination of the disclosures of Besemer et al. and Wadhwa with Li et al. would still result in a pharmaceutical composition in which the release modifying excipients are sealed away from the pharmaceutically active ingredient.

In contrast thereto, Applicants invention teaches that the mixture of the pharmaceutically active ingredient and the controlled release modifying complex results in a pharmaceutical composition that synergistically extends the release of the pharmaceutically active ingredient. This is clearly *not* what would result from the combination of Li et al., Besemer et al. and Wadhwa, and the rejection is considered to be without basis or merit.

Furthermore, the Examiner merely states that one would be motivated to substitute the hydroxypropyl methylcellulose disclosed in Li et al. for the retrograded starch as presently recited in claimed pharmaceutical composition. However, the Examiner does not provide any support for this bare assertion. Li et al. teach that hydroxypropyl methylcellulose is used to seal the low and high molecular weight polyethylene oxides to provide stability to the pharmaceutical composition. Besemer et al. do not teach that retrograded starch can be used to seal polyethylene oxide or otherwise serve as a substitute for the functionality of the hydroxypropyl methylcellulose sealing layer of Li et al. as it would have to for one of skill in the art to make such a modification.

In contrast, Besemer et al. teach that the use of acid-resistant retrograded starch has different properties from hydroxypropyl methylcellulose because it is resistant to breaking and is subject to little or no disintegration and little to no attack by the enzyme alpha-amylase, nor by acid. Thus, the Examiner incorrectly relies on Besemer et al. to substitute the hydroxypropyl methylcellulose taught in Li et al to seal the polyethylene oxides from the pharmaceutically active ingredient for the presently recited retrograded starch which is mixed with the polyethylene oxides and pharmaceutically active ingredients to form the claimed pharmaceutical composition.

Wadhwa does not cure the deficiencies of Li et al. and Besemer et al. Rather, Wadhwa is merely cited for its disclosure that macrolides such as clarithromycin are alkaline and acid sensitive. Thus, even by combining the disclosure of Li et al. with the disclosures of Besemer et al. and Wadhwa, one skilled in the art would not even arrive at the claimed pharmaceutical composition. Accordingly, as the combination of Li et al. with Besemer et al. and Wadhwa would not have resulted in the claimed invention, Applicants respectfully request that the Examiner withdraw the rejection of amended Claims 1, 3-7, 9, 22-24 and 29-54 under 35 USC 103(a).

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For the foregoing reasons, amended Claims 1, 3-7, 9, 22-24 and 29-54 as presented herein are believed to be in condition for allowance. Such early and favorable action is earnestly solicited.

Respectfully submitted,



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